Internal Letter



Rockwell International

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Date

February 3, 1987

TO

Name Organization Internal Address)

Those Listed

FROM

No

R. E. Richardella
Waste Proc & Inst Engr
Building 130
5102

SUBJECT RECOMMENDATION ON FINAL DISPOSITION OF ROOM 141, BUILDING 771

On January 8, 1987, a team was established to recommend a final disposition for Room 141, Building 771. The team consisted of members from Plutonium Operations, Support Operations, HS&E, and the Plutonium Recovery Project. Attached to this letter is the report documenting the analysis an recommendations relative to Room 141.

The team was chartered to evaluate three options for Room 141

Leave the room in its present condition.

2) Immobilize the contamination and permanently seal the room.

3) Decontaminate the room.

Option 1 was concluded to be unacceptable. Plant HS&E policies, derived from DOE Order 5480, require the immediate cleanup of contamination. Additionally, the possibility exists that the soil under Room 141 may be contaminated. This potential environmental impact must be addressed.

Option 2, immobilization, was addressed. No suitable immobilization technique could be recommended. Gross immobilization of the room, by filling it with a substance that would set up over time, did not turn out to be acceptable. Structural problems relative to floor loading precluded the use of concrete. No other large-scale immobilization option was generated. The use of paints as fixatives was evaluated. Use of such fixatives would require room entry for cleanup of loose material and for fixative application. Immobilization must also include sealing the underside of the floor. There appears to be no practical or cost effective way of accomplishing this portion of the immobilization.

Efforts in the area of developing immobilization techniques are continuing independent of Room 141 team activities. At the present time, however, immobilization does not appear to the area option.

Option 3, decontamination of the room, was reevaluated. Plant experts on decontamination and decommissioning (D&D) were brought in from the Plutonium Recovery Project (PRP), and a step-by-step outline on a decontamination approach was formulated. New cost estimates for the decontamination of Room 141 were generated based on the PRP approach. The estimate for the decontamination effort is \$650,000 (compared to a previous estimate of \$1,400,000). Option 3, decontamination of \$00000 (compared to a previous recommended disposition of the assessment team.

ADMIN RECORD

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Based on the plant's knowledge of immobilization technology, immobilization of Room 141 cannot be recommended. One of this nation's most experienced D&D companies, AWEC, Inc., will be onsite on February 12, 1987. As part of their briefing on D&D techniques and capabilities, they have been asked to provide information on immobilization techniques. This information may lead to a reevaluation of immobilization as an option for Room 141 disposition.

It is recommended that plans be formulated to decontaminate Room 141 as an FY 1988 activity, using expense funding. Decontamination of Room 141 can be accomplished with minimal risk. Room 141 would be made available to Building 771 operations for use as a much needed storage area. Additionally, decontamination of the room addresses the problem of potential environmental impacts as a result of contamination migration through the concrete floor.

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R. E. Richardella, Manager Waste Process & Instrumentation Engineering

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